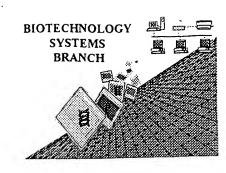


RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/753, 139Source: 09/953, 139Date Processed by STIC: 1/23/200/

APR 1 8 2001

TECH CENTER 1600/2900

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcompliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker



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SERIAL NUMBER: ERROR DETECTED SUGGESTED CORRECTION ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE The number/text at the end of each line "wrapped" down to the next line. Wrapped Nucleics This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping". The amino acid number/text at the end of each line "wrapped" down to the next line. Wrapped Aminos This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping". The rules require that a line not exceed 72 characters in length. This includes spaces. Incorrect Line Length The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs Misaligned Amino Acid between the numbering. It is recommended to delete any tabs and use spacing between the numbers. Numbering This file was not saved in ASCII (DOS) text, as required by the Sequence Rules. Non-ASCII Please ensure your subsequent submission is saved in ASCII text so that it can be processed. Sequence(s) ____ contain n's or Xaa's which represented more than one residue. Variable Length As per the rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing. A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid Patentin ver. 2.0 "bug" Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences. missing. If intentional, please use the following format for each skipped sequence: Skipped Sequences (OLD RULES) (2) INFORMATION FOR SEQ ID NO:X: (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS") (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: This sequence is intentionally skipped Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s). Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence. Skipped Sequences (NEW RULES) <210> sequence id number <400> sequence id number 000 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing. (NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents. are missing this mandatory field or its response. Use of <213>Organism (NEW RULES) Use of <220>Feature are missing the <220>Feature and associated headings Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown" (NEW RULES) Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules) Please do not use "Copy to Disk" function of Palentin version 2.0. This causes a corrupted Patentin ver. 2.0 "bug" file, Tesalting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).

Instead, please use "File Manager" or any other means to copy file to floppy disk.

OIPE

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/753.139 DATE: 01/23/2001

TIME: 10:38:55

Input Set : A:\ES.txt Output Set: N:\CRF3\01232001\I753139.raw

Does Not Comply Corrected Diskette Needed

```
3 <110> APP'ICANT: Quirk, Stephen
              Tyrrell, David
      6 <120> TITLE OF INVENTION: Design and Use of Advanced Zinc Chelating Peptides to Regulate Matrix
              Metalloproteinases
                                                                      ( Global eva)
      9 <130> FILE REFERENCE: 44039-227522 11301-0200
-> 11 <140> CURRENT APPLICATION NUMBER: US/09/753,139
-> 11 <141> CURRENT FILING DATE: 2000-12-29
                                                           Per 1.823 of new Sequerce Rules,
     11 <160> NUMBER OF SEQ ID NOS: 10
     13 <170> SOFTWARE: Patentin version 3.0
                                                         the only valid (2137 responses are;
     15 <210> SEQ ID NO: 1
     16 <211> LENGTH: 7
     17 -: 212> TYPE: PRT
                                                           Unknown, Artificial Sequence, or
     18 <213> ORGANISM: Synthetic Peptide
                                                               scientific name (Genus/species)

(one of the three)

(see circled portion of them 12 on Euro Summary

Sheet)
     20 <220> FEATURE:
     21 <221> NAME/KEY: VARIANT
     22 <222> LOCATION: (2)..(2)
     23 <223> OTHER INFORMATION: X = Sec or Thr
     26 · 220> FEATURE:
     27 <221> NAME/KEY: VARIANT
     28 <222> LOCATION: (4)..(4)
     29 <223> OTHER INFORMATION: X = Ser, Ala or Val
     32 <400> SEQUENCE: 1
34 Cys Xaa Cys Xaa Pro His Pro
     35 1
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 12
     39 <212> TYPE: PRT 40 <213> ORGANISM Synthetic Peptid
     42 <220> FEATURE:
     43 <221> NAME/KEY: VARIANT
     44 <222> location: (1)..(1)
     45 <223> OTHER INFORMATION: X = Ile or Val
     48 <220> FEATURE:
     49 <221> NAME/KEY: VARIANT
     50 <222> LOCATION: (2)..(2)
     51 <223> OTHER INFORMATION: X = Glu, Gln or Arg
     54 <220> FEATURE:
     55 <221> NAME/KEY: VARIANT
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56 <222> LOCATION: (3)..(3)

61 <221> NAME/KEY: VARIANT 62 <222> LOCATION: (4)..(4)

67 <221> NAME/KEY: VARIANT 68 <222> LOCATION: (5)..(5)

60 <220> FEATURE:

66 <220> FEATURE:

57 <223> OTHER INFORMATION: X = Phe or Tyr

63 < 223 > OTHER INFORMATION: N = The or Val

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RAW SEQUENCE LISTING
                                                               DATE: 01/23/2001
                     PATENT APPLICATION: US/09/753,139
                                                               TIME: 10:38:55
                     Input Set : A:\ES.txt
                     Output Set: N:\CRF3\01232001\1753139.raw
     69 <223> OTHER INFORMATION: X = Tyr or His
    72 <220> FEATURE:
     73 <221> NAME/KEY: VARIANT
     74 <222> LOCATION: (7)..(7)
     75 <223> OTHER INFORMATION: X = Ala, Pro or Glu
     78 <220> FEATURE:
     79 <221> NAME/KEY: VARIANT
     80 <222> LOCATION: (8)..(8)
     81 <223> OTHER INFORMATION: X = Pro, Phe or Ala
    84 <220> FEATURE:
    85 <221> NAME/KEY: VARIANT
    86 <222> LOCATION: (9)..(9)
    87 <223> OTHER INFORMATION: X = Ser, Asp or Met
    90 <220> FEATURE:
    91 -221> NAME/KEY: VARIANT
    92 <222> LOCATION: (10)..(10)
    93 <223> OTHER INFORMATION: X = Ala or Ser
    96 <220> FEATURE:
    97 <221> NAME/KEY: VARIANT
     98 <222> LOCATION: (11)..(11)
    99 <223> OTHER INFORMATION: X = Val or Len
     102 <220> FEATURE:
     103 <221> NAME/KEY: VARIANT
     104 <222> LOCATION: (12)..(12)
    105 <223> OTHER INFORMATION: X = Cys or Gly
108 <400> SEQUENCE: 2
📢 🔾 110 Xaa Xaa Xaa Xaa Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa
    111 1
                       5
                                              1.0
    113 <210> SEQ TD NO: 3
    114 <211> LENGTH: 9
                                                           Ahr is not a nucleotide sequerce
see p. I regarding (2137 response
    115 <212> TYPE: PRT
    116 <213> ORGANISM: Synthetic Oligonucleotide
    118 <220> FEATURE:
    119 <221 NAME/KEY: VARIANT
120 <222 LOCATION: (1)...(1)
    121 <223> OTHER INFORMATION: X = Met, Val or Leu
    124 <220> FEATURE:
    125 <221> NAME/KEY: VARIANT
    126 <222> LOCATION: (2)..(2)
    127 <223> OTHER INFORMATION: X = His, Phe or Tyr
    130 <220> FEATURE:
    131 <221> NAME/KEY: VARIANT
   . 132 <222> LOCATION: (3)..(3)
    133 <223> OTHER INFORMATION: X = Ile or Thr
    136 <220> FEATURE:
    137 <221> NAME/KEY: VARIANT
    138 <222> LOCATION: (4)..(4)
    139 <223> OTHER INFORMATION: X = Thr, His or Gly
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142 <220> FEATURE:

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Input Set : A:\ES.txt
                        Output Set: N:\CRF3\01232001\1753139.raw
       143 <221> NAME/KEY: VARIANT
       144 <222> LOCATION: (5)..(5)
       145 <223> OTHER INFORMATION: X = Leu or Thr
       148 <220> FEATURE:
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       150 <222> LOCATION: (7)..(7)
       151 <223> OTHER INFORMATION: X = Asp, Ash or Ser
       154 <220> FEATURE:
       155 <221> NAME/KEY: VARIANT
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       157 <223> OTHER INFORMATION: X = Phe or Tyr
       160 <220> FEATURE:
       161 <221> NAME/KEY: VARIANT
       162 <222> LOCATION: (9)..(9)
       163 <223> OTHER INFORMATION: X = fle or Val
       156 <400> SEQUENCE: 3
OK--> 168 Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
                            5
       169 1 ...
       171 <210> SEQ TD NO: 4
                                               ser p. 1 regarding (2137 responser)
ser p. 1 regarding (2137 responser)
       172 <211> LENGTH: 7
       173 <212> TYPE: PRT
       174 <213> ORGANISH: Synthetic Oligonucleotide
       176 <400> SEQUENCE:
       178 Cys Ser Ala Val Pro Val His
       179 1
       181 <210> SEQ ID NO: 5
       182 <211> LENGTH: 7
       183 <212> TYPE: PRT
       184 <213> ORGANISM Synthetic Peptide
186 <400> SEQUENCE:
       188 Asp Ser Ala Wal Pro Val His
       189 1
       191 <21.0> SEQ ID NO: 6
       192 <211: LENGTH: 9
       193 <212> TYPE: PRT
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       196 <400> SEQUENCE: 6
       198 Ile Tyr Thr Ala Cys Met Ser Ala Val
       199 1
       201 <210> SEQ ID NO: 7
       202 <211> LENGTH: 7
       203 <212> TYPE: PRT
       204 <213> ORGANISM: Synthetic Peptide
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       208 Val His Thr His Leu Cys Asp
       209 1
       211 <210> SEQ 1D NO: 8
       212 <211> LENGTH: 5
       213 <212> TYPE: PRT
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/753,139

DATE: 01/23/2001

-TIME: 10:38:55

 RAW SEQUENCE LISTING
 DATE: 01/23/2001

 PATENT APPLICATION: US/09/753,139
 TIME: 10:38:55

Input Set : A:\ES.txt

Output Set: N:\CRF3\01232001\I753139.raw

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218 Cys Thr Cys Val Pro
219 1
221 <210> SEQ ID NO: 9
222 <211> GENGTH: 4
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229 1
231 <210> SEQ TD NO: 10
232 <2.11> LENGTH: 5
233 <212> TYPE: PRT
234 <213> ORGANISM: Synthetic Peptide
236 <400> SEQUENCE: 10
238 His Thr Ile Thr His
239 1
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/753,139

DATE: 01/23/2001 TIME: 10:38:56

Input Set : A:\ES.txt

Output Set: N:\CRF3\01232001\1753139.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs. Replaced Current Filing Date L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ 1D#:1 L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ 1D#:2 L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3